

  
1. (Unamended) An image display apparatus comprising image display means for displaying a parallax image, a display optical system for guiding light from the image display means to a position of an exit pupil, exit pupil control means for spatially and temporally dividing the exit pupil into a plurality of areas and controlling a passing beam to each other, and image switching control means for controlling switching between parallax images of the image display means in correspondence to passing beams through the respective areas of the exit pupil, wherein a plurality of parallax images are perceived by a single eye of an observer.

2. (Unamended) An image display apparatus comprising image display means for displaying a parallax image, a display optical system for guiding light from the image display means to a position of an exit pupil, and exit pupil control means for controlling a position or a size of the exit pupil in a direction perpendicular to the optical axis, dividing the exit pupil into a plurality of areas, and successively generating the plurality of divided areas of the exit pupil without duplication, wherein the image display means successively displays corresponding parallax images according to beams passing the respective areas thus generated.

3. (Unamended) The image display apparatus according to Claim 1 or 2, wherein said exit pupil has a diameter two to five times larger than a diameter of the pupil of the observer using said image display apparatus.

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4. (Unamended) The image display apparatus according to Claim 1 or 2, wherein  
~~any one of the plurality of areas in said exit pupil has a size not more than half a size of the~~  
pupil of the observer using said image display apparatus.

5. (Unamended) The image display apparatus according to Claim 1 or 2, said  
image display apparatus being mounted on the head of the observer, wherein said exit pupil  
~~is fixed at the position of the pupil of the observer.~~

6. (Unamended) The image display apparatus according to Claim 1 or 2, wherein  
said exit pupil is divided into a plurality of areas only in the horizontal direction.

7. (Unamended) The image display apparatus according to Claim 1 or 2, wherein  
said image display means comprises a transmissive spatial light modulator and said exit  
pupil control means comprises a self-emissive spatial light modulator.

8. (Unamended) The image display apparatus according to Claim 1 or 2, wherein  
said image display means comprises a self-emissive spatial light modulator and said exit  
pupil control means comprises a transmissive spatial light modulator.

9. (Unamended) The image display apparatus according to Claim 1 or 2, wherein  
each of said image display means and said exit pupil control means comprises a  
transmissive spatial light modulator.

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10. (Unamended) The image display apparatus according to Claim 1 or 2, wherein said exit pupil control means comprises a micro-mirror device.

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11. (Amended) An image display apparatus comprising image display means for displaying a parallax image, a display optical system for guiding light from the image display means to a divided aperture having a plurality of apertures, and control means for selecting an arbitrary aperture out of the plurality of apertures as a passing area of light and for controlling a position of the light-passing aperture in the divided aperture and the parallax image displayed on the image display means.

12. (Unamended) The image display apparatus according to Claim 11, wherein said dividing aperture has a diameter two to five times larger than a diameter of the pupil of the observer using said image display apparatus.

13. (Unamended) The image display apparatus according to Claim 11, wherein any one of the plurality of apertures in said dividing aperture has a size not more than half a size of the pupil of the observer using said image display apparatus.

14. (Unamended) The image display apparatus according to Claim 11, said image display apparatus being mounted on the head of the observer, wherein said dividing aperture is fixed at the position of the pupil of the observer.

15. (Unamended) The image display apparatus according to Claim 11, wherein said dividing aperture is divided into a plurality of apertures only in the horizontal direction.

16. (Unamended) The image display apparatus according to Claim 11, wherein said image display means comprises a transmissive spatial light modulator and said dividing aperture comprises a self-emissive spatial light modulator.

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17. (Unamended) The image display apparatus according to Claim 11, wherein said image display means comprises a self-emissive spatial light modulator and said dividing aperture comprises a transmissive spatial light modulator.

18. (Amended) The image display apparatus according to Claim 11, wherein each of said image display means and said divided aperture comprises a transmissive spatial light modulator.

19. (Amended) An image input apparatus comprising image capture means for capturing an image of an object, an imaging optical system for guiding light from the object to the image capture means, aperture generating means for spatially and temporally dividing a pupil of the imaging optical system into a plurality of apertures and controlling a passing beam to each aperture, and control means for controlling switching between parallax images taken by the image capture means in correspondence to the respective apertures of the pupil so as to effect input of the parallax images, wherein the aperture has

a size no more than half the size of a human pupil and can be positioned at one of plural positions within an area substantially equal to the size of a human pupil.

20. (Amended) An image input apparatus comprising image capture means for capturing object information, an imaging optical system for guiding light from an object to the image capture means, aperture generating means for controlling a position or a size of a pupil of the imaging optical system, dividing the pupil into a plurality of apertures, and limiting a beam-passing aperture, and control means for making the image capture means successively take corresponding parallax images according to positions of the aperture of the pupil, wherein the aperture has a size no more than half the size of a human pupil and can be positioned at one of plural positions within an area substantially equal to the size of a human pupil.

21. (Unamended) The image input apparatus according to Claim 19 or 20, wherein said pupil is divided into a plurality of areas only in the horizontal direction.

22. (Unamended) The image input apparatus according to Claim 19 or 20, wherein said aperture generating means comprises a transmissive spatial light modulator.

23. (Amended Twice) A stereoscopic display system comprising the image display apparatus of Claim 1, 2, or 11, and further comprising an image input apparatus comprising image capture means for capturing an image of an object, an imaging optical system for guiding light from the object to the image capture means, aperture generating means for

spatially and temporally dividing a pupil of the imaging optical system into a plurality of areas and controlling a passing beam to each area, and control means for controlling switching between parallax images taken by the image capture means in correspondence to the respective areas of the pupil so as to effect input of the parallax images.

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24. (Cancelled)

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25. (Unamended) The stereoscopic display system according to Claim 23, wherein a position and a size of the pupil of said imaging optical system are approximately equal to those of said exit pupil.

49. (Cancelled)

50. (Cancelled)

#### REMARKS

Applicants request favorable reconsideration and allowance of this application in view of the foregoing amendments and the following remarks.

Claims 1-23 and 25 are pending in this application, with Claims 1, 2, 11, 19, and 20 being independent. Claims 24, 49, and 50 have been cancelled without prejudice.

Claims 11, 18-20, and 23 have been amended. Support for these amendments can be found in the original disclosure, and therefore no new matter has been added.